Appl. No. 10/765,289 Amdt. dated June 6, 2008 Reply to Office Action of March 20, 2008

## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in this application. Added text is indicated by <u>underlining</u>, and deleted text is indicated by <u>strikethrough</u>. Changes are identified by a vertical bar at the left edge of text.

## Listing of Claims:

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1-14. (canceled).

1 15. (previously presented) An access control management method according 2 to claim 32 wherein a MAC address is obtained from said host computer by adoption of a 3 protocol based on an iSCSI text mode negotiation.

## 16-22. (canceled)

23. (currently amended) A storage system for processing a command transmitted by a host computer-connected to a storage apparatus of the storage system by a network, said storage system comprising:

a storage unit for storing data to be processed in accordance with said command;

a memory for holding an access management table for storing first information on identification of said host computer;

a storage apparatus to which the host computer is connected by a network and which stores data to be processed in accordance with said command;

means for receiving an iSCSI login request transmitted from the host computer;

means for determining a first determination whether or not a source address included in an IP header of the iSCSI login request is an IP address in the same segment\_network

as a port of the storage apparatus;
means for obtaining a MAC address assigned to the port of the host computer
when the source address included in the IP header is not an IP address in the same network as the
port of the storage apparatus as a result of the first determination;

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means for determining a second determination whether or not the MAC address has been cataloged in an access management table that defines the MAC addresses identifying the host computer by IP address;

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means for approving an access by said iSCSI login request from the host computer to the storage apparatus when the MAC address has been cataloged in the access management table as a result of the second determination;

means for determining a third determination whether or not a logical unit (LU) specified by the command has been cataloged in the access management table as the LU associated with the source IP address of a frame including included within the command; means for performing said second determination and said third determination in accordance with a source MAC address in the frame of the iSCSI login request sent from said

host computer and cataloged in said access management table when the source IP address of the iSCSI login request is in the same segment as the port of its storage apparatus according to said

29 first determination; and

> means for accessing the LU to process the command when said LU has been cataloged in the access management table as a result of the third determination.

- 24. (currently amended) A storage system according to claim 23, wherein a 1 2 command-request is given to a SNMP manager that transmits a request to the host computer to acquire an MIB a Management Information Base data for the source IP address included in the 3 4 iSCSI login request to obtaining obtain the MAC address.
- (previously presented) A storage system according to claim 23, wherein a 1 25 MAC address is obtained from said host computer by adoption of a protocol based on an iSCSI 2 3 text mode negotiation.
- (previously presented) A storage system according to claim 23, further 1 26. 2. comprising:
- a control memory for recording log data that the iSCSI login request has been 3 made from a port of another network when the source address included in the IP header were not 4

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the IP address in the same network as the port of the storage apparatus according to said the first determination means.

1 27. (previously presented) A storage system according to claim 24, further
2 comprising:
3 means for determining whether or not a predetermined time has lapsed without a

response received from the host computer, wherein said second determination is performed if the storage apparatus receives an SNMP response to a SNMP request to the host computer without causing a timeout.

- 28. (previously presented) A storage system according to claim 23, further
   comprising,
- a control memory for recording log data indicating that the access from said host
   computer has not been approved therein,
  - wherein processing of the command is not carried out if the requested access is determined to be a disallowed access to the LU by the third determination means.
- 1 29. (currently amended) An access control management method for
  2 processing a command comprising an access request transmitted by a host computer to a storage
  3 apparatus by way of a network, said access control management method comprising the steps of:
  4 receiving an iSCSI login request transmitted from the host computer;
  - determining a first determination as to whether or not a source address included in an IP header of the iSCSI login request is an IP address in the same segment-network as a port of the storage apparatus:
  - obtaining a MAC address assigned to the port of the host computer when the source address included in the IP header is not an IP address in the same network as the port of the storage apparatus as a result of the first determination;
  - determining a second determination as to whether or not the MAC address has been cataloged in an access management table that defines the MAC addresses identifying the host computer by IP address;

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approving an access by said iSCSI login request from the host computer to the storage apparatus when the MAC address has been cataloged in the access management table as a result of said second determination;

determining a third determination as to whether or not a logical unit (LU) specified by the command has been cataloged in the access management table as the LU associated with the source IP address of a frame including included within the command;

performing said second determination and said third determination in accordance with a source MAC address in the frame of iSCSI login request sent from said host computer and <a href="mailto:cataloged in.said">cataloged in.said</a> access management table when the source IP address of the iSCSI login request is in the same segment as the port of its storage apparatus according to said first determination; and

accessing to the LU to process the command when said LU has been cataloged in the access management tables as a result of the third determination.

- 1 30. (currently amended) An access control management method according to
  2 claim 29, wherein a eemmand-request is given to a SNMP manager that transmits a request to the
  3 host computer to acquire an MIB for the source IP address included in the iSCSI login request to
  4 ebtaining-obtain\_the MAC address.
  - 31. (previously presented) An access control management method according to claim 29, wherein log data that the iSCSI login request has been made from a port of another network is recorded in a control memory if the source address included in the IP header were not the IP address in the same network as the port of the storage apparatus according to said the first determination.
- 32. (previously presented) An access control management method according
   to claim 30, further comprising:
- determining whether or not a predetermined time has lapsed without a response
   received from the host computer, wherein said second determination is performed if the storage

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- 5 apparatus receives an SNMP response to a SNMP request to the host computer without causing a
- 6 timeout.
- 1 33. (previously presented) An access control management method according
- 2 to claim 29, wherein log data indicating that the access from said host computer has not been
- 3 approved is recorded in a control memory and processing of the command is not carried out if
- 4 the requested access is determined to be a disallowed access to the LU on the third
- 5 determination.